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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/965,375

09/26/2001

Florian Patrick Nierhaus

2001P17780US

6408

7590

06/15/2007

Siemens Corporation
Attn: Elsa Keller, Legal Administrator
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER

PHAN, MAN U

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

06/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/965,375	Applicant(s) NIERHAUS ET AL.	
	Examiner Man Phan	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-10,14-19 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-10, 14-19, 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The application of Nierhaus et al. for the "Method for background noise reduction and performance improvement in voice conferencing over packetized" filed 09/26/2001 has been examined. This application is a Request for Continued Examination (RCE) under C.F.R. 1.114 filed on 05/01/2007. Claims 1, 2, 4-10, 14-19, 21-25 are pending in the application.

Claim Rejections - 35 USC ' 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1, 4-6, 9 and 10, 14, 17-18 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epps (US#5,034,947) in view of Laursen et al. (US#6,847,618).

With respect to claim 1, 9, 10, 17 and 18, Epps (US#5,034,947) and Laursen et al. (US#6,847,618) disclose a novel system and method for centralized multipoint conferencing in a packet network, according to the essential features of the claims. Epps (US#5,034,947) discloses in Figs. 10 and 11 a whisper conferencing system in packet network comprising receiving inputs from a number of participants in the conferencing session (ref. 5, Fig. 10); determining a number of prominent inputs from the received inputs (Ref. 1010, Fig. 10); combining the determined prominent inputs into a first output stream suitable for being sent to at least one participant of the number of participants in the conferencing session (Sum circuit 1040, Fig. 10); and combining determined prominent inputs into a second output stream for an originating participant of a prominent input of the determined number of prominent inputs, the second output stream not including the originating participant's input (Ref. 1040, Figs. 10 & 11). The Applicant's attention is directed to Fig. 10 of Epps (US#5,034,947) for the block diagram components of the combined whisper/nulling circuit 1000, in which receiving inputs from a number of participants in the conferencing session (Ref. 5, Fig. 10); determining a number of prominent inputs from the received inputs (Ref. 1010, Fig. 10); combining the determined prominent inputs into a first output stream suitable for being sent to at least one participant of the number of participants in the conferencing session (See also Fig. 11; Col. 7, lines 64 plus).

In the same field of endeavor, Laursen et al. (US#6847,618) discloses an apparatus and method for audio conferencing over a *packet network* (conference calls carried out over packet-switched networks). Laursen teach in Figs. 13A-C the flow chart diagrams illustrated the

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operation of a distributed conference bridge of Fig. 10 in establishing a conference call, in which at step 1320, audio source 1040 determines a number of active speakers based on the energy monitored in step 1310, and any number of active speakers can be selected.

Regarding claims 4-6 and 14 and 21-23, Epps further teaches in Fig. 10 a block diagram illustrated the components of the combined whisper/nulling circuit, in which The processor 1010 receives whisper select signals on lead 1012 and the talk slot grant signals on leads 1014 for lines 1-k. The whisper select signals 1012 are generated upon request by the users or the system operator as whisper mode enable signals. The processor 1010 detects the select signal and routes signals via the cross-point switch 1020 appropriately. In whisper select mode, lead 1012 becomes activated for two individual talk slots as will be discussed later. The processor 1010 is interconnected over a bus 1016 to the cross-point switch 1020. In the combined whisper/nulling circuit 1000 of FIG. 10, the subtraction circuit 60 of FIG. 1 is modified to also provide summation. In the TALKER NULLNG MODE of operation, the speech data in a time slot for the talker is delayed by circuits 50, switched from lines 54 to lines 1032 by the select circuits 1030, and delivered through the difference/summation circuits 1040 wherein subtraction occurs. This mode of operation is the same as for FIGS. 1-9 except with the addition of the select circuits 1030 and the use of the whisper select 1012. In the WHISPER MODE of operation, the speech data for the two parties to the whisper conference are interchanged in their respective time slots by cross-point switch 1020 under control of processor 1010 and delivered over lines 1024. The select circuits 1030 for the two whisper conference parties are then activated by whisper select 1012 to deliver the interchanged speech data to the difference/summation circuit 1040 where the interchanged speech data in the talk

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slot for the first whisper conferee is added to the sum of all speech data 20 for delivery to the second whisper conferee so that the second whisper conferee hears the first whisper conferee talking as well as the conversation from the other talkers in the conference call. However, no other party to the conference call will hear the whisper conference as whisper data is not delivered to the summation circuit 40 via 1022 (See also table 11 for example of a six party conference call with 2 parties engaged in a whisper conference; Col. 7, lines 59 plus).

Regarding claims 2, 7, 8 and 15, 16 and 19, 24, 25, Laursen et al. (US#6,847,618) discloses inputs are determined as prominent based upon a characteristic including at least one of loudness, signal strength, clarity and prominence history (Ref. 1310, Fig. 13A).

One skilled in the art would have recognized the need for performance improvement of centralized multipoint conferencing in a packet network, and would have applied Laursen's teaching of the determining a number of prominent inputs in establishing conference bridge into Epps's novel use of the combined whisper/nulling circuit in conference call. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Laursen's method and system for distributed conference bridge processing into Epps's whisper circuit for a conference call bridge including talker nulling and method therefor with the motivation being to provide a method and system for providing a conferencing session to a plurality of participants.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Vandermersch (US#2003/0063573) is cited to show the method for handling larger

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number of people per conference in voice conferencing over packetized networks.

The Kline (US#5,530,699) is cited to show the method for distributed voice conferencing in a fast packet network.

The Dorenbosch (US#6,697,614) is cited to show the method and apparatus for distribution of a right to speak among a plurality of devices participating in a real time voice conference.

The Simard et al. (US#6,940,826) is cited to show the apparatus and method for packet based media communications.

The Simard et al. (US#6,956,828) is cited to show the apparatus and method for packet based media communications.

The Simard et al. (US#2005/0185602) is cited to show the apparatus and method for packet based media communications.

The Fandrianto et al. (US#7,006,455) is cited to show the system and method for supporting conferencing capabilities over packet switched networks.

The Rabipour et al. (US#2002/0105917) is cited to show the method and apparatus for packet based media communication.

The Koistinen et al. (US#2004/0076271) is cited to show the Audio signal quality enhancement in a digital network.

The Matt et al. (US#6,999,920) is cited to show the exponential echo and noise reduction in silence intervals.

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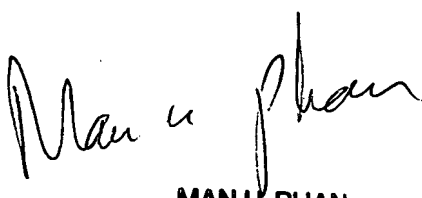
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149.

The examiner can normally be reached on Mon - Fri from 6:00 to 3:00 EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

06/11/2006.


MAN U. PHAN
PRIMARY EXAMINER